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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,964	08/06/2001	Paul M. Neugebauer	1110-WO P99125US1A	1450
26562	7590	03/10/2004	EXAMINER	
BRIDGESTONE AMERICAS HOLDINGS, INC.			MAKI, STEVEN D	
1200 FIRESTONE PARKWAY			ART UNIT	PAPER NUMBER
AKRON, OH 44317			1733	

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/922,964	Applicant(s) NEUGEBAUER ET AL. <i>eb</i>	
	Examiner Steven D. Maki	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1733

1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2-17-04 has been entered.

2) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3) Claims 19-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 19, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the angled sipes compensate for residual aligning torque "produced by other components of the tire". There is no express disclosure of "other components of the tire". The original disclosure describes changing the residual aligning torque of a pneumatic tire but does not describe and thereby reasonable convey compensating for residual aligning torque "produced by other components of the

tire". For example, the original disclosure does not teach compensating for RAT of "other components of the tire" instead of the tread pattern.

In claim 19, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the subject matter of "wherein each of the said tread blocks in each rib is free of sipes which extend at an angle substantially opposite to that of the sipes formed therein". First: This subject matter is not expressly described in the original disclosure. Second: This description redefines the invention in a manner not contemplated by the original disclosure. The above language permits sipes normal to the tread surface and each block to contain oppositely inclined sipes wherein the angles are not substantially equal. In other words, the original disclosure fails to reasonably convey targeting some sipes to the exclusion of others (both of which are not described) since each block of the original disclosure has all of the sipes inclined. No mixing and matching is described or indicated.

In claim 19, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is "the sipes do not compensate for residual aligning torque within each of said individual tread blocks". First: The original disclosure does not describe each block as having a "residual aligning torque". Second: If the blocks inherently have a residual aligning torque, then the sipes inherently compensate for

Art Unit: 1733

residual aligning torque in the block since the sipes are described in the original disclosure as effecting change in RAT. No description in the original disclosure is provided as to how the sipes should be configured so as to compensate for RAT of "other components", but not RAT within each block.

- 4) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 5) Claims 19-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 next to last line ambiguously refers to "the sipes" (which ones?).

Claims 27 and 28 ambiguously refer to "the sipes" (which ones?).

- 6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 7) Claims 19-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbelleau et al (US 4298046) and optionally German '697 (DE 19506697) and German '547 (DE 4107547).

Herbelleau et al discloses a pneumatic tire having a tread, radial carcass and a reinforcement (belt) comprising two plies of crossed cables 21, 22. The tread includes rows of blocks defined by wide grooves 9 of depth H. Each block has slits (sipes) therein wherein the sipes in each block are inclined with respect to the radial direction in

the same direction. The sipes in the outermost block rows are inclined in one direction whereas sipes in the middle block rows are oriented in the opposite direction. Hence, Herbelleau et al's sipes are inclined in the same manner as the claimed sipes. As to the angle of inclination, Herbelleau et al teaches inclining the sipes at an angle of at most 45 degrees or more preferable at most 25 degrees. Herbelleau et al does not specifically recite using an angle of 2-15 degrees.

As to claim 1, it would have been obvious to one of ordinary skill in the art to incline Herbelleau et al's sipes at angle with respect to a radial plane of 2-15 degrees (a relatively small angle) since Herbelleau et al's teaching that inclining the sipes at angle with respect to a normal to the tread surface of at most 25 degrees is more preferred than inclining at an angle with respect to of at most 45 degrees directs one of ordinary skill in the art toward using relatively small angles for the inclined sipes.

As to symmetrical, one of ordinary skill in the art would readily understand that the walls of each block of Herbelleau et al are symmetrical as claimed since (1) Herbelleau et al's invention is directed at arranging slits (sipes) so that some are active in braking while others are active in acceleration and (2) Herbelleau et al contains no description of using different grooves 9 so as to define an asymmetrical block. In contrast to describing the grooves as being different so as to require leading and trailing walls of the block being inclined at different angles, Herbelleau et al merely states that the "relief element 10 is bounded by two relatively wide grooves 9 of a depth H". In any event: It would have been obvious to bound Herbelleau et al's relief element with transverse grooves 9 having the same shape so that the relief element has symmetrical

leading and trailing walls as claimed since German '697 and German '547, which like Herbelleau et al teach sipes inclined with respect to the radial direction, suggest defining the block having such sipes using transverse having the same shape. See figure 8 of German '697 and figures 1, 4 and 5 of German '547.

In claim 19, the description of "the angled sipes in the tread blocks in the first and second compensate for residual aligning torque produced by other components of the tire" fails to require tire structure not shown and disclosed by Herbelleau et al.

Herbelleau et al's pneumatic tire must have a RAT, as do all pneumatic tires.

Herbelleau et al's slits (sipes) must affect RAT because the sipes in the middle block rows are inclined with respect to the radial direction in one direction whereas the slits (sipes) in the outermost block rows are inclined in a direction opposite to the one direction. In other words, Herbelleau et al's sipes are inclined in the same manner as that recited in claim 1. There is no difference between the inclination of Hebellean et al's sipes and the claimed sipes. With respect to "compensate", this reads on increasing the RAT (to compensate for a RAT that is too low where a certain RAT is needed for desired performance on a cambered road) or decreasing the RAT (to compensate for a RAT that is too high where a zero RAT is desired). By affecting the RAT as described above, Herbelleau et al's sipes must either increase or decrease the RAT and as such satisfy the requirement of "compensate" for residual aligning torque.

As to the dependent claims: As to claim 20, the limitation of 7 degrees would have been obvious in view of Herbelleau et al's teaching to incline the sipes at an angle of at most 25 degrees. As to claim 21 (depth 20-100%), Herbelleau et al suggests

Art Unit: 1733

using sipes having a depth  $h$  near the depth  $H$  of the grooves (figures 1, 6). As to claims 22 and 23, see perpendicular orientation shown in figure 6. Claim 23 is generic to 90 degrees. As to claims 24 and 25, it would have been obvious to provide Herbelleau et al's sipes with the claimed small width (0.015-0.06 inch or 0.03 inch) in view of Herbelleau et al's teaching that the slits have a width  $e$  which is other than zero (very small widths thereby being suggested). As to claim 26, Herbelleau et al suggests using zigzag sipes. See figure 6 and col. 4 lines 15-20. As to claims 27 and 28, see location of sipes in figure 6. As to claim 29, this claim reads on completely across since a sipe extending completely across the block also extends partially across. In any event: it would have been an obvious alternative to extend Herbelleau et al's sipes partially across the block since German '697 suggests extending sipes, which like those of Herbelleau et al's sipes are inclined with respect to the radial direction, only partially across the block (figure 8). Also, see German '547's teaching that internal fine treads [sic cuts / sipes] may or may not be connected to the grooves (page 3 of translation). As to claim 31, each of Herbelleau et al's blocks have plural sipes.

8) Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herbelleau et al (US 4298046) and optionally German '697 (DE 19506697) and German '547 (DE 4107547) as applied above and further in view of van der Meer et al (US 5538060).

As to claim 30, it would have been obvious to provide Herbelleau et al with the claimed generally V-shaped configuration in view of van der Meer et al's suggestion to



Art Unit: 1733

use v shaped grooves between shoulder blocks in order to improve traction for off road use.

Remarks

9) Applicant's arguments with respect to claims 19-31 have been considered but are moot in view of the new ground(s) of rejection.

The rejections using Japan '314 and Japan '715 have been withdrawn in view of the amendment to claim 19 filed 2-17-04.

As to applicant's arguments filed 12-22-03, note the new ground of rejection.

As to applicant's comments filed 2-17-04, the examiner merely notes that "compensate" is broad (e.g. not limited to the claimed tire having a zero RAT) but not indefinite.

Europe 1020306 is cited of interest for teaching use sipes to affect RAT.

10) No claim is allowed.

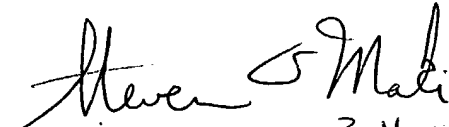
11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
March 4, 2004

  
3-4-04  
STEVEN D. MAKI  
PRIMARY EXAMINER  
~~GROUP 1900~~  
AV 1733